GAU 1626 TUCS #10

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of Llinas-Brunet, M. et al

Appln. No.	09/368,866	Atty. Docket No.	13/068
Filed:	08/05/99	Group Art Unit:	1626
For:	Hepatitis C Inhibitor Tri-Peptides	Examiner:	Oswecki, J.

RESPONSE TO RESTRICTION REQUIREMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

This is in response to the Office Action dated July 26, 2000, requiring restriction in the present application. August 26, 2000, falls on a Saturday, making this response timely filed on Monday, August 28, 2000.

The Examiner has required restriction between Groups I through XII as set forth in the Office Action. Applicants hereby elect to prosecute Group II, directed to compounds of formula (I) having optionally substituted pyridinyl, benzopyridinyl (i.e., quinolyl), pyridinyloxy, benzopyridinyloxy (i.e., quinolyloxy) and/or pyridinylmethoxy groups alone or in combination with pyrazolyl, thiazolyl, thienyl, furanyl, indolyl and/or indolininyl groups in addition to the proline moiety.

Applicants respectfully traverse the recited scope of Group II and respectfully submit that this group should include all compounds of formula (I) wherein R_{20} is Het or (lower alkyl)-Het, wherein the Het group is optionally substituted pyridinyl or optionally substituted quinolyl. This

necessarily includes related compounds containing the pyridinyl-CH_2, quinolyl-CH_2, pyridinyl-NH-, quinolyl-NH-, pyridinyl-S- or quinolyl-S- groups in addition to the groups mentioned by the Examiner. (See Claim 1) Applicants submit that all such compound are sufficiently related such that they would be classified similarly to the compounds specifically mentioned by the Examiner for Group II and such that no undue examination burden would be present.

Applicants submit that claim 75 should be grouped in Group IX with claim 74, because claim 75 encompasses a specific embodiment within the scope of claim 74.

Applicants submit that claim 82 should be grouped in Group XII with claim 81, because claim 82 is clearly within the scope of claim 81.

Applicants respectfully traverse the restriction between the compounds of Groups I to VII (claims 1-65) and the intermediates of Group XI (claims 76-79). The Examiner alleges that these groups are distinct partly because the intermediate product (in Group XI) is "deemed to be useful as active ingredients in antibacterial derivative compounds such as taught in U.S. 5,164,402." The Examiner's citation of U.S. 5,164,402 (the '402 patent) is confusing, however. There does not appear to be any disclosure in the '402 patent with respect to the intermediates that are claimed in Applicants' claims 76-79. Indeed, the intermediates disclosed in the '402 patent appear to compounds having a nitrogen-containing cycle fused with a cyclopropyl ring. Accordingly, any use of the compounds disclosed in the '402 patent should be irrelevant since the intermediates therein are structurally different from the intermediates of the present invention.

Applicants also respectfully traverse the restriction between the compounds of Groups I to VII (claims 1-65) and the processes of Groups VIII-X (claims 73-75, 80). The Examiner alleges that these groups are distinct partly because "similar products can be made by processes as taught in U.S. 5,633,388." The Examiner's citation of US 5,633,388 (the '388 patent) is confusing, however. There does not appear to be any disclosure in the '388 patent with respect to any compounds that are similar to the compounds in Applicants' claims 1-65.

Specifically, the '388 patent discloses a method of synthesizing a benzimidazole-containing compound (see Scheme A, column 4) using polyphosphoric acid, followed by a base-mediated condensation. Alternatively, the '388 patent discloses another benzimidazole-containing compound (see Scheme B, column 5) prepared via a tin-mediated condensation. The present application discloses the use of polyphosphoric acid as a reagent used to form a quinoline compound (see page 37, Scheme III and Example 2 on page 46). Compounds of this type are then condensed with a proline derivative to form compounds of the present invention using the reactions shown in Schemes III, IV and V. The chemistry described in the '388 patent is very different from that described in the present application and would not be applicable to the synthesis of the compounds of the present invention.

In view of the foregoing, withdrawal and/or modification of the restriction requirement and an examination on the merits are respectfully requested.

If any points remain at issue which can best be resolved by way of a telephonic or personal interview, the Examiner is kindly requested to contact the undersigned attorney at the local telephone number listed below.

Respectfully submitted,

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Date: August 28, 2000

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I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to:
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on August 28, 2000.

Philip I. Datlow